



Fostering Excellence In Academic Projects Through Software Packages

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Abstract: Today, we live in the data era where the user of statistical or data analysis software is unavoidable, in any research field, ie the choice of the right software tool or platform is a strategic issue for the research department. In the current scenario, about 85% of the research carries quantitative data for the analysis. Here comes the importance of high tech software programmes. Today researchers have switched from manual analysis with paper to more efficient digital/electronic analysis with statistical software. These are designed to perform a group of coordinated functions, tasks, or activities for the benefit of the user. Moreover threat of virus is very less in application software, since any business that incorporates it can restrict access and can come up with means to protect their network as well. Even though there are several software available in the market, SPSS is more preferable than other software. IBM SPSS Statistics Server is robust, powerful analytical software that seamlessly scales from handling the analytical needs of a single department to hundreds of users across the enterprise. It provides all of the features of IBM SPSS Statistics, plus capabilities that deliver faster performance, more efficient processing of large datasets and enhanced security in enterprise deployments.

This article focus on the comparative view of traditional software with modern software like SPSS and also focus on the acceptance and reasons for the fostering of excellence in academic projects through SPSS with special reference to MBA programme. This software is one of the most popular statistical packages which can perform highly complex data manipulation and analysis with simple instructions. SPSS can take data from almost any type of file and use them to generate tabulated reports, charts and plots of distributions and trends, descriptive statistics and conduct complex statistical analyses. This packages of program is available for both personal and mainframe computers . SPSS analysis gives a perfect graphical representation and also an appropriate result for the data that has been entered. SPSS is just a drag and drop process which has almost all basic and some advanced statistical analysis which helps the research scholars to easily adapt to this software and can do the analysis part and attain their result.

Keywords: data management, statistical software, SPSS, research.

Introduction:

As we know the growth of technology has enormously revolutionized in the communication and availability of data and information. This has greatly contributed towards the research and development which can be seen everywhere in the world. Now, any kind of qualitative as well as quantitative research can be done effectively with different statistical software packages available .SPSS program, which itself has been a product of research released



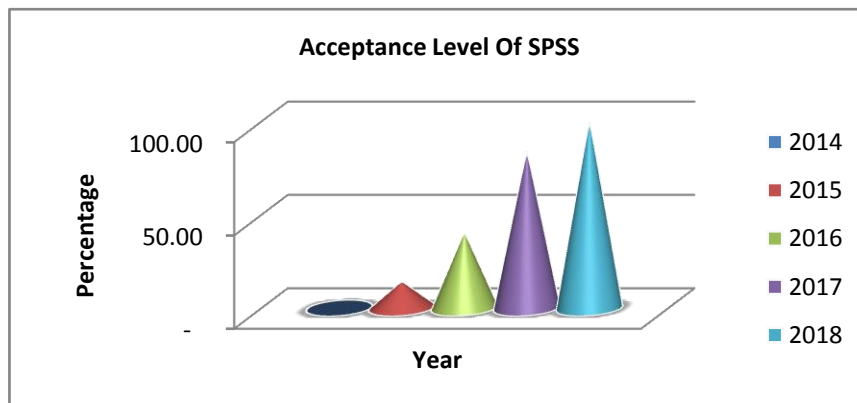
in 1968 was originally named as Statistical Package for the Social Sciences. Soon after its release, it quickly rose to become one of the most used statistical programs in market research, surveying, healthcare and social sciences to name a few. SPSS is most widely used in social science disciplines and courses. SPSS assists the user in describing data, testing hypotheses and looking for a correlation or relationship between one or more variables. SPSS is very suitable for most regression analysis and different kinds of ANOVA (regression, logistic regression, survival analysis, analysis of variance, factor analysis, multivariate analysis but not suitable for time series analysis and multilevel regression analysis)-Wikipedia (2014). Many students, both undergraduate and graduate, are taught SPSS during research analysis classes in demography, psychology, sociology and other social sciences. Moreover, it enables pundits faction research data for easy presentation. It helps professionals to interact with data thereby paving way for creativity and innovation.

Even though SPSS looks a lot like a spreadsheet application, spreadsheets are capable of a lot of things that SPSS is good at, like generating graphs and statistics on a data set. One of the main difference is that it can be summed up by saying that spreadsheets are designed to be very flexible and broadly applicable to many different tasks, while SPSS was designed specifically for statistical processing of large amounts of data at an enterprise level. I.e., SPSS is a definite winner when it comes to data analysis, as this software is especially designed for statistics. When compared with Microsoft Excel, SPSS has:

- An easier and quicker access to basic functions
- A wide range of charts and graphs to choose from
- Faster access to statistical tests

SPSS is used all around in all fields. This paper focus on the students especially MBA students following SPSS as their statistical software package as part of their academic projects. To know about this, data from MBA students of Kannur university has been taken. The data shows the trend in acceleration of SPSS for academic projects among the students in 5 years,

Chart 1



Source (Primary Data)



The above chart clearly show the acceptance level and acceleration level of SPSS software by the students in 5 consecutive years. Starting from 2014 , none of the students used SPSS, the second year ie 2015 , there was 14% of users followed by 41%, 84% of users in 2017 and in 2018 100% of the students used SPSS . This acceleration of the software is mainly because of its applicability in the field of research.

Applicability of SPSS statistics for data analysis

There are 15 modules IBM SPSS statistics for data analysis according to the research needs.

- **SPSS Exact Tests module** enables one to use small samples and still feel confident about the results
- **SPSS forecasting module** enables analysts to predict trend and develop forecasts quickly and easily-without being an expert statistician
- **SPSS Missing Values module** finds the relationships between any missing values in your own data and other variables. Missing data can seriously affect your models and results. It is used by survey researchers, social scientists, data miners and market researchers to validate data.

Now let us look at why the students are moving towards the SPSS. In order to know the reason behind this, a small survey has been conducted from the students of MBA at Kannur university campus. For this following factor has been ranked by the sample survey to know which among them are the most preferred criteria for selecting SPSS are. Factors included for the study are as follows.

1. Thorough data management - When it comes to organizing and managing data, the SPSS software offers the user a lot of control. Since the software remembers the location of the variables and cases, it provides quicker and accurate data analysis.

2. User-friendly – SPSS software is user-friendly compared to other software, as it gives clear picture regarding the module.

3. Range of analytical tools in SPSS - Since SPSS is a Statistical Package (by name), its range of analytical tools is enormous. For example, Excel can calculate the Pearson correlation between two variables. SPSS can do it for way more than two variables at a time, using Pearson and Kendall's tau-b and Spearman's methods, and indicate one or two-tailed significance tests, and flag significant correlations, and display certain summary statistics, and handle missing values in one of two ways.

4. Better organization of the output - In SPSS, the output is usually kept apart from the data, by storing all the results in a separate file that is different from the file in which the data is stored. Using SPSS, does not make an overwriting of any other information by accident.

5. Popularity – Among different statistical software, because of its different versions, SPSS has established its place among the researchers, business analyst as well as students of various streams.

The mean rank of the above mentioned factors is analysed. From the analysis, the mean rank (table no 1) of the factor "Range of analytical tools available in SPSS" can be seen as 1.27 which means that it is the main or most influencing factor for the students to use SPSS .This factor is



followed by “organisation of output” with mean rank of 1.78, popularity with 3.48,” thorough data management” with 3.80 and the factor “user-friendly “with mean rank of 4.67 respectively.

Table 1 Mean Ranks of factors influencing acceleration of SPSS

Particulars	Mean Rank
Thorough data management	3.80
User friendly	4.67
Range of analytical tools	1.27
Organisation of output	1.78
Popularity	3.48

Now a days the advantage of this statistical tools has made the students to select different topics for their academic projects for undertaking a project , This is mainly because there are bundle of analytical tools to resolve each and every questions in their study From the analysis also, it has been concluded that SPSS is widely accepted by the MBA students mainly because of the variability of analytical functions.

Conclusion

Even though there are lot of good software that can be used for data organization, using a specially developed analysis and statistical software like SPSS can provide an in-depth, faster and accurate data analysis. Now the IBM SPSS Statistics as the world’s leading statistical software enables us to make much more effective tool than spreadsheets, databases or standard multi-dimensional tools for analysts. SPSS Statistics excels at making sense of complex patterns and relations and enabling users to draw conclusions and make predictions. All these reasons have proven to be the cause behind fostering the depth of the academic projects among students.

Reference

Books and Journals:

1. Martin Lee Abbott, “*Understanding Educational Statistics Using Microsoft Excel and SPSS*”, John Wiley & Sons, -2014
2. Kenneth Stehlik-Barry, Anthony J. Babinec , “*Master data management & analysis techniques with IBM SPSS Statistics 24*”, Packt Publishing Ltd, 2017

Websites:

- www.listendata.com
- www.olspsanalytics.com



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